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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Attorney Docket No.: 2950.27US01

Buckley et al.

Confirmation No.: 5623

Application No.: 09/435,748

Examiner: Ruthkosky, M.

Filed: November 8, 1999

Group Art Unit: 1745

For: BATTERIES WITH THIN ELECTRODES

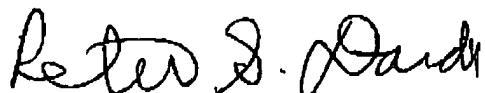
LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant notes that they have not received a signed Form PTO-1449 that was filed on June 7, 2000. A copy of this form is attached. Applicant respectfully requests the return of a signed version of the (7) pages of the Form PTO-1449 dated June 7, 2000.

Respectfully submitted,



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Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 50-3863.

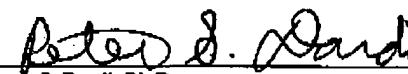
Application No. 09/435,748

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office, Fax No. 571-273-8300 on the date shown below.

May 28, 2008

Date


Peter S. Dardi, Ph.D.

FORM PTO-1449		Atty. Docket No.: N19.12-0028	Serial No.: 09/435,748
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT		Applicant:	
COPY		Buckley et al.	
		Filing Date	Group Art:
		November 8, 1999	2811

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AA	3,918,988	11-11-75	Sandors G. Abens	136	6	
AB	4,576,883	03-18-86	Hope et al.	429	192	
AC	4,649,037	03-10-87	Marsh et al.	423	338	
AD	4,675,260	06-23-87	Sakurai et al.	429	191	
AE	4,828,834	05-09-89	Nagaura et al.	429	194	
AF	4,830,939	05-16-89	Lee et al.	429	192	
AG	4,959,282	09-25-90	Dahn et al.	429	224	
AH	4,980,251	12-25-90	Thackeray et al.	429	224	
AI	5,037,712	08-06-91	Shackle et al.	429	121	
AJ	5,153,081	10-06-92	Thackeray et al.	429	194	
AK	5,211,933	05-18-93	Barboux et al.	423	596	

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
AL	WO 96/12676	5-02-97	PCT				
AM	WO 97/20773	6-12-97	PCT				
AN	WO 97/37935	10-16-97	PCT				

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AO	"A Thermodynamic, Structural And Kinetic Study Of The Electrochemical Lithium Intercalation into the Xerogel V ₂ O ₅ 1.5 H ₂ O In a Propylene Carbonate Solution" by, Baddour et al., J. Electroanal. Chem. 314 (1991) pp. 81-101.
AP	"Aerogels and Xerogels of V ₂ O ₅ As Intercalation Hosts" by, Le et al., J. Electrochem. Soc., 1996, pp. 0809-0810.
AC	All-Solid-State Lithium Thin-Film Rechargeable Battery with Lithium Manganese Oxide" by Park et al., Electrochem. and Solid-State Letters, 2(2) (1999) pp. 59-59.

EXAMINER:

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Sheet 2 of 7

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
BA	5,281,496	01-25-94	Robert L. Clark	429	218	
BB	5,312,611	05-17-94	Takami et al.	423	447	
BC	5,348,726	09-20-94	Wang et al.	423	605	
BD	5,356,842	10-18-94	Yamakawa et al.	501	87	
BE	5,496,664	03-05-96	Gerhard Stern	429	224	
BF	5,514,496	05-07-96	Mishima et al.	429	218	
BG	5,523,073	06-04-96	Sumida et al.	423	605	
BH	5,561,006	10-01-96	Lecerf et al.	429	218	
BI	5,587,256	12-24-96	Wilson et al.	429	218	
BJ	5,589,300	12-21-96	Fauteux et al.	429	218	
BK	5,604,057	02-18-97	Gholam-Abbas Nazri	429	224	

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
BL		0 820 113 A1	01-21-98	EPO			
BM		0 837 036 A1	04-22-98	EPO			English Abstract

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BN	"Amorphous V ₂ O ₅ (-P ₂ O ₅) And WO ₃ As Insertion Anodes For Lithium-Ion Batteries" by, Shodai et al., The Electrochem. Soc. Proc., Vol. 94-28, pp. 224-233.
BO	"An Investigation Into The Discharge Capacity Loss For Composite Insertion Electrodes Based On Li _x V ₂ O ₅ " by, Barker et al., Electrochim. Acta, Vol. 40, No. 8, pp. (1995) 949-952.

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
CA	5,674,642	10-07-97	Le et al.	429	218	
CB	5,674,644	10-07-94	Gholam-Abbas Nazri	429	224	
CC	5,677,087	10-14-97	Amine et al.	429	224	
CD	5,695,897	12-09-97	Amatucci et al.	429	48	
CE	5,702,679	12-30-97	Sheargold et al.	423	599	
CF	5,705,291	01-06-98	Amatucci et al.	429	137	
CG	5,738,957	04-14-98	Amine et al.	429	223	
CH	5,759,717	06-02-98	Amine et al.	429	218	
CI	5,759,720	06-02-98	Glenn G. Amatucci	429	224	
CJ	5,783,332	07-21-98	Amine et al.	429	218	
CK	5,807,646	09-15-98	Iwata et al.	429	224	
CL	5,952,125	09-14-99	Bi et al.	429	231.2	
CM	5,965,293	10-12-99	Idota et al.	429	218.1	

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
	CN						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

CO	"Cathode Characteristics of Amorphous V ₂ O ₅ with Polymer Electrolyte and Li Anode at 100°C" by Shodai et al., J. Electrochem. Soc., Vol. 141, No. 10, October 1994, pp. 2611-2614.
CP	"Cathode Limited Charge Transport and Performance of Thin Film Rechargeable Lithium Batteries" by, Bates et al., Electrochem. Soc. Proceedings, Vol. 94-28, 1994, pp. 342-347.
CQ	"Comparison Of LiV ₂ O ₅ Cathode Materials Prepared by Different Methods" by, West et al.. J. Electrochem. Soc., Vol. 143, No. 3, March 1996, pp. 820-825.

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U.S. PATENT DOCUMENTS

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DA	5,290,592	03-01-94	Izuchi et al.	427	203	

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
DR						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

DC	"Comparison of LiV ₂ O ₅ Cathode Materials Prepared By High Temperature And Gel Synthesis" by West et al., J. Electrochem. Soc., Vol. 143, No. 3, March 1996, pp. 820-825.
DD	"Composite Cathode Formulation Effects On The Discharge Characteristics of Lithium Rechargeable Cells Based on V ₂ O ₅ " by, Seidi et al., Solid State Ionics 70, (1995) pp.169-173.
DE	"Effects of Aging and Drying on Structure of V ₂ O ₅ Gels" by, Hirashima et al., Journal of Non-Crystalline Solids 186 (1995) pp. 54-58.
DF	"Electrochemical Insertion/Extraction of Lithium into/from Vanadium Pentoxide Xerogel in a Propylene Carbonate Solution" by, Miura et al., Dept. of Chemistry, Faculty of Science and Technology, Vol. 59, No. 2, 1991, pp. 157-161.
DG	"Electrochemical Lithium Intercalation into and Deintercalation From Vanadium Oxide Electrode By Using Potentiostatic Current Transient Techniques" by, Sae et al., Solid State Ionics, Vol. 90, (1996), pp. 251-260.
DH	"Electrochemical Properties of Non-Stoichiometric V ₂ O ₅ " by, West et al., Electrochimica Acta, No. 12, 1993, pp. 1829-1833.
DI	"Electronic and Vibrational Properties of Rb-Intercalated MoS ₂ Nanoparticles" by Bandow et al., Materials Science and Engineering A204, (1995) pp. 222-226.
DJ	"Evaluation of a New Type of Vanadium Oxide From Peroxo-polyvanadate as a Cathode Material For Rechargeable Lithium Batteries" by Ugaji et al., J. Electrochem. Soc., Vol 142, No. 11, November 1995, pp. 3664-3668.
DK	"Improved Capacity Retention In Rechargeable 4 V Lithium/Lithium Manganese Oxide (spinel) Cells" by Gunnov et al., Solid State Ionics 69 (1994) pp. 59-67.

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U.S. PATENT DOCUMENTS

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EA						

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
EB						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EC	"Improved Rechargeability of Vanadium Pentoxide Xerogel in a Lithium Cell by substituting Interlamellar Water with Aniline" by, Miura et al., Denki Kagaku, Communication, Vol. 59, No. 3 (1991) pp. 252-253.
ED	"Li/Li _{1-x} V ₂ O ₅ Batteries V. Comparison with Other Secondary Cells and Influence of Micro- and Macro-Structural Alterations on the Cathode Performance" by, Pasquali et al., J. Electrochem. Sci. and Tech., December 1986, pp. 2434-2458.
EE	"Li/Li _{1-x} V ₂ O ₅ Secondary Batteries Synthesis and Characterization of An Amorphous Form of the Cathode" by, Pistoia et al., J. Electrochem. Soc. Vol. 137, No. 8, August 1990, pp. 2365-2370.
EF	"Modeling A Porous Intercalation Electrode with Two Characteristic Particle Sizes" by, Darling et al., J. Electrochem. Soc. Vol. 144, No. 12, December 1997, pp. 4201-4208.
EG	"Nanocomposite Manganese Oxides for Rechargeable Lithium Batteries" by, Kim et al., Electrochemical and Solid-State Letters, 1(5), 1998, pp. 207-209.
EH	"New Process for the Preparation of M ²⁺ -V ₂ O ₅ -H ₂ O Xerogels and Their Transformation to -M ²⁺ -V ₂ O ₅ Bronzes (M = Ca, Mn, Co, Ni, Cu)" by, Watanabe et al., J. Mater. Chem., 5(5), 1995, pp. 753-756.
EI	"Performance of Lithium/ V ₂ O ₅ Xerogel Coin Cells" by, Tipton et al., J. Electrochem. Soc., Vol. 143, NO. 11, November 1996, pp. 3473-3477..
EJ	"Performance of Polymer Electrolyte Cells At +25 To +100°C" by, Munshi et al., Solid State Ionics 26 (1988) pp. 41-46.
EK	"Preparation and Lithium Intercalation of A New Vanadium Oxide With A Two-Dimensional Structure" by, Ribino et al., Solid State Ionics (1995), pp. 239-244.
EL	"Raman Spectroscopic Investigations of Li-Intercalated V ₂ O ₅ Xerogel" by, Cazzanelli et al., Journal of Non-Crystalline Solids 208 (1996) 89-98.

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FA						

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
	FB						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

FC	"Rechargeable Lithium/Vanadium Oxide Cells Utilizing 2Me-THF/LiAsF ₆ " by, Abraham et al., Journal of Electrochemical Society, Vol. 128, No. 12, December 1981, pp. 2493-2501.
FD	"Relationship Between Chemical Bonding Nature and Electrochemical Property of Li ₂ Mn ₃ O ₈ , Spinel Oxides With Various Particle Sizes: "Electrochemical Grafting" Concept" by, Treuil et al., J. Phys. Chem. B, Vol. 103, March 1999, pp. 2100-2106.
FB	"Small Particle-Size Lithium Oxide: An Improved Cathodic Material For High Rate Rechargeable Lithium Batteries" by, Pestoia et al., Journ. of Power Sources, 27, 1989, pp. 35-43.
FF	"Spin Coated V ₂ O ₅ Xerogel Thin Films As Hosts For Lithium Insertion" by, Passerini et al., The Electrochemical Society Proceedings, 1994, vol. 94-28, pp. 296-303.
FG	"Spin-Coated V ₂ O ₅ Xerogel Thin Films. 1. Microstructure and Morphology" by, Passerini et al., Chem. Mater., 1995, pp. 780-785.
FH	"Structural Changes In Vanadium Oxide-Based Cathodes During Cycling In A Lithium Polymer Electrolyte Cell" by, Macklin et al., Electrochimica Acta, Vol. 37, No. 9, 1992, pp. 1715-1720.
FI	"Substitution of Interlamellar Water In Vanadium Pentoxide Xerogel With Propylene Carbonate and Its Effects on the Cathode Behavior in a Lithium Cell" by, Miura et al., Vol. 59, No. 2 (1991) pp. 149-151.
FJ	"Synthesis and Characterization of Vanadium Oxide Aerogels" by, Chaput et al., Journal of Non-Crystalline Solids 188, Vol. (1995) pp. 11-18.
FK	"The Effect Of Doping Electrochromic Molybdenum Oxide With Other Metal Oxides: Correlation of Optical And Kinetic Properties" by, Monk et al., Solid State Ionics 80, (1995) pp. 75-85.

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U.S. PATENT DOCUMENTS

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GA						

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
	GB						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

GC	"The Performance of Single-Phase V ₂ O ₅ In The Lithium/Polymer Electrolyte Battery" by, Lampe-Önnerud et al., J. Electrochem. Soc., Vol. 142, No. 11, November 1995, pp. 3648-3651.
GD	"The Switching Mechanism in V ₂ O ₅ Gel Films" by, Zhang et al., J. Appl. Phys. 64 (2), July 15, 1988, pp. 729-733.
GE	"Thin-Film Rechargeable Lithium and Lithium-Ion Batteries" http://www.ssd.ornl.gov/batteryweb/ , September 1998.
GF	"Vanadium Oxide Cathode Materials For Secondary Lithium Cells" by, Murphy et al., Journal of Electrochem. Society, Vol. 126, No. 3, March 1979, pp. 497-499.
GG	"Vanadium Oxide Kerogels As Electrodes For Lithium Batteries" by, West et al., Electrochimica Acta, Vol. 38, No. 9, 1993, pp. 1215-1220.
GH	"Vanadium Oxides As Electrode Materials For Rechargeable Lithium Cells" by, West et al., Journal of Power Sources, Vol. 20, (1987), pp. 165-172.
GI	"XAS and Electrochemical Characterization of Lithium Intercalated V ₂ O ₅ Kerogels" by, Passerini et al., Solid State Ionics Vol. 90, (1996) pp. 5-14.

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